

4/5/93

than 20 days after the date of this notice to: Office of Export Trading Company Affairs, International Trade Administration, Department of Commerce, Room 1800H, Washington, DC 20230. Information submitted by any person is exempt from disclosure under the Freedom of Information Act (5 U.S.C. 552). Comments should refer to this application as "Export Trade Certificate of Review, application number 91-A0007."

OETCA has received the following application for an amendment to Export Trade Certificate of Review No. 91-00007, which was issued on January 21, 1992 (57 FR 5133, February 12, 1992).

Summary of the Application

Applicant: National Association of Energy Service Companies ("NAESCO"), 1440 New York Avenue, Washington, DC 20005, Contact: A. John Armstrong, Counsel, Telephone: (703) 356-3100.

Application No.: 91-A0007.

Date Deemed Submitted: March 25, 1992.

Request for Amended Conduct: NAESCO seeks to amend its Certificate to add Energy Performance Services, Inc. of Houston, Texas, and its Subsidiary—Energy Performance Services of North America of Montreal, Quebec, Canada, as "Members" within the meaning of § 325.2(1) of the Regulations (15 CFR 325.2(1)).

Dated: March 30, 1993.

George Muller,
Director, Office of Export Trading Company Affairs.

[FR Doc. 93-7794 Filed 4-2-93; 8:45 am]

BILLING CODE 3510-DR-M

National Oceanic and Atmospheric Administration

[Docket No. 921186-2286]

Interim Policy on Artificial Propagation of Pacific Salmon Under the Endangered Species Act

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.

ACTION: Notice of interim policy.

SUMMARY: NMFS announces its interim policy on how it will consider artificial propagation in the listing and recovery of Pacific salmon under the Endangered Species Act (ESA). This policy provides guidelines to assist in the conservation of listed species and to help avoid additional species listings. This policy also provides guidance for evaluating artificial propagation in section 7 consultation, section 10 permitting, and recovery planning pursuant to the ESA.

DATES: This interim policy takes effect immediately and will remain in effect until revised or superseded. Comments on this policy will be accepted until June 4, 1993.

ADDRESSES: Comments and information should be addressed to Director, Office of Protected Resources, NMFS, 1335 East-West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT:

Rob Jones, Protected Species Branch, Environmental and Technical Services Division, NMFS, 911 N.E. 11th Avenue, room 620, Portland, OR 97232 (503/230-5429), or Marta Nammack, Protected Species Management Division, NMFS, 1335 East-West Highway, Silver Spring, MD 20910, at 301/713-2322.

SUPPLEMENTARY INFORMATION: The evaluation of the species' status for listing or delisting under the ESA depends on natural populations, which for Pacific salmon are defined as the progeny of naturally reproducing fish. Natural fish are also the focus of evaluations to determine whether a Pacific salmon population represents an evolutionarily significant unit (ESU) of the biological species and hence can be considered a "species" under the ESA. Pacific salmon from artificial propagation programs may be candidates for use in recovery programs depending on available knowledge of the similarity of the naturally and artificially propagated fish in genetic, phenotypic, and life-history traits, and in habitat characteristics.

In considering recovery options for a listed species, an objective assessment of uncertainties and potential risks should be undertaken and management alternatives requiring less intervention evaluated before implementing artificial propagation. Artificial propagation of listed salmon species for recovery must attempt to avoid these risks by preserving the genetic and ecological distinctiveness of the listed species. Artificial propagation of a listed salmon species is not a substitute for eliminating the factors causing or contributing to the species' decline, and recovery programs should reflect integrated planning that addresses these factors. In addition, artificial propagation of unlisted species should be conducted in a manner that minimizes adverse impacts to listed and unlisted species. Whether for recovery, fishery production or other mitigation purposes, artificial propagation must minimize the potential for deleterious effects on both listed and unlisted species if it is to be consistent with the

conservation of genetic and ecological diversity in Pacific salmon.

Background

The ESA (16 U.S.C. 1531 *et seq.*) was enacted in 1973 in recognition that:

Various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth untempered by adequate concern and conservation (sec. 2(a)).

In passing the ESA, Congress acknowledged that these species are of:

Esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people (sec. 2(a)).

To be considered for listing under the ESA, a group of organisms must constitute a "species," which is defined to include:

Any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature (sec. 3(15)).

NMFS has determined that, to qualify as a distinct population segment, a Pacific salmon population must be substantially reproductively isolated and represent an important component in the evolutionary legacy of the biological species. A Pacific salmon population (or group of populations) meeting these criteria is considered to be an ESU (56 FR 58612, November 20, 1991). The ESU concept recognizes that long-term species viability depends on the maintenance of genetic variability within the biological species.

The stated purposes of the ESA are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species; and to take such steps as may be appropriate to achieve (these) purposes * * * (sec. 2(b)).

The ESA, thus, mandates the restoration of threatened and endangered species in their natural habitats to a level at which they can sustain themselves without further legal protection. For Pacific salmon (*Oncorhynchus*), the ESA's focus is, therefore, on natural populations—the progeny of naturally spawning fish—and the ecosystems upon which they depend.

Despite this emphasis on conserving species in their natural habitat, the ESA recognizes that conservation of listed species may be facilitated by artificial means. The ESA defines conservation to include:

The use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such

methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation * * * (sec. 3(3)).

Artificial propagation may represent a potential method to conserve listed salmon species when the artificially propagated fish are determined similar to the listed natural population in genetic, phenotypic, and life-history traits, and in habitat use characteristics. Regardless of this, however, evaluations of the status of the population under the ESA depend on the viability of the population in the natural habitat and on the status of ongoing conservation measures.

With respect to Pacific salmon, there is considerable experience in the use of artificial propagation for supporting fisheries. Because Pacific salmon have a moderately-high fecundity (typically several thousand eggs per female) and a high natural mortality through the early life-history stages, successful fish hatcheries generally produce many more juveniles for release into the ecosystem than are produced by natural fish in the wild. This increased juvenile production in some cases has resulted in increased returns of adult fish and has supported recreational, tribal, and commercial fisheries. However, the efficacy of artificial propagation as a tool for conserving natural salmon populations has not been clearly demonstrated.

Because there is, at present, considerable uncertainty about artificial propagation as a means to increase natural salmon populations, and because artificial propagation may have profound consequences for the viability of natural salmon populations, consideration of its use should be based on an objective assessment of genetic and ecological risks, balancing the potential for deleterious effects against risk to the population of irreversible harm or extinction if artificial propagation is not implemented.

Genetic problems that may arise through artificial propagation are of three general types. First, taking wild broodstock may contribute directly to the decline of the natural population. A severe reduction in population size may in turn lead to erosion of genetic variability and reduced fitness due to inbreeding depression—both factors that are believed to increase the risk of extinction faced by a population. Second, in addition to contributing to the loss of within-population genetic variability, artificial propagation can substantially reduce genetic differences

between populations. For example, hatchery fish often stray at a higher rate than natural fish. Breeding between hatchery strays and local, natural fish may erode adaptive genetic differences between populations that are the result of long years of natural selection. Transfers of fish among hatcheries or transplanting fish outside their native area often exacerbate this problem. Finally, adaptation to hatchery conditions can lead to domestication during artificial propagation. Because the hatchery environment differs in many ways from that encountered in the wild, the selective pressures experienced by the two types of fish also differ markedly. The general result is genetic change in a hatchery population relative to its natural ancestors, and such changes may reduce the ability of the population to survive and reproduce in the wild. Moreover, these changes magnify the adverse consequences of interbreeding between hatchery and wild fish that results from straying or stock transfers.

Artificial propagation may also pose a variety of ecological risks to salmon populations. These risks include increased competition and predation, displacement of natural fish, altered migratory and spawning behavior, and disease transfer. For example, the release of large numbers of hatchery fish can elevate levels of competition for food, habitat, or mates and may lead to displacement of natural fish from their habitat. Attendant reductions in the size of natural populations may increase the risk of local extinction if abundance or density falls below threshold levels necessary for persistence. Hatchery juveniles are often larger than natural juveniles of the same age and will use resources that are otherwise available to natural fish. The intensity of competition is likely to be an increasing function of the number of hatchery fish released. Predators attracted to concentrations of hatchery fish may also prey on fish from natural populations, which may not be able to sustain the increased predation rates. A similar phenomenon occurs when harvest levels in mixed-stock fisheries are increased to take advantage of abundant hatchery fish. A high abundance of hatchery fish in migration corridors may also alter the migratory behavior of natural fish. Finally, diseases may be transferred between hatchery and natural salmon populations, and the risk of this occurring increases with the number of infected hatchery fish released into the wild.

These genetic and ecological risks of artificial propagation can pose serious threats to natural salmon populations.

The viability of natural populations depends on their genetic and ecological diversity, and the use of artificial propagation to restore salmon abundance should not be allowed to erode this diversity.

Since 1990, NMFS has listed four distinct population segments ("species") of Pacific salmon as threatened under the ESA (Sacramento River winter chinook salmon: 55 FR 46515, November 5, 1990; Snake River sockeye salmon: 56 FR 58619, November 20, 1991; and Snake River spring/summer and fall chinook salmon: 57 FR 14653, April 22, 1992). Artificial propagation has been used to preserve genetic resources of these species and is being considered in interagency cooperative efforts for the conservation and recovery planning for each of them. Impacts resulting from artificial propagation must be minimized to avoid conflicts with recovery of listed species and to avoid additional listings of currently unlisted species. NMFS has developed this interim policy regarding the artificial propagation of Pacific salmon to aid in minimizing these impacts. The guidelines described in this policy are intended to meet the ESA's objective to conserve the diversity of Pacific salmon in their natural habitats.

Policy Statement

NMFS will consider artificial propagation of Pacific salmon under the ESA as follows:

(1) Whether a natural population is considered distinct and hence a "species" under the ESA will be determined solely by the two criteria that define an ESU—its reproductive isolation and its contribution to the biological species' evolutionary legacy. Genetic resources important to the species' evolutionary legacy may reside in hatchery fish as well as in natural fish, in which case the hatchery fish can be considered part of the biological ESU in question. Hatchery fish considered to be part of the ESU could also be included as part of the listed species and protected under the ESA. Concurrent with a determination to list a salmon species under the ESA, a determination should be made whether any existing hatchery fish can be considered part of the biological ESU and whether or not the hatchery fish should be included as part of the listed species. This class of fish includes pre-spawning adults held in an artificial propagation facility; eggs or juveniles held in a facility; and fish that were released from a facility prior to the listing but have not completed their life cycle. Determinations about existing

hatchery fish should be conducted as follows.

If available information indicates that (1) the hatchery population in question is of a different genetic lineage than the listed natural populations, (2) artificial propagation has produced appreciable changes in the hatchery population in characteristics that are believed to have a genetic basis, or (3) there is substantial uncertainty about the relationship between existing hatchery fish and the natural population, the existing hatchery fish will not be considered part of the biological ESU and will not be included as part of the listed species. In this case, direct take of fish from the listed species for broodstock would not be permitted, and hatchery operations would need to be consistent with ESA requirements (see item (5) of this policy statement below).

If available information indicates that existing hatchery fish can be considered part of the biological ESU, a decision must be made whether to include them as part of the listed species. In general, such fish will not be included as part of the listed species. An exception may be made for existing hatchery fish if they are considered to be essential for

recovery. This situation might occur if the natural population faces a high, short-term risk of extinction, or if the hatchery population is believed to contain a substantial proportion of the genetic diversity remaining in the species. In such cases, the existing hatchery population should be included as part of the listed species, and would be protected under the ESA. All aspects of hatchery operation involving that population, including collection of natural or returning hatchery fish for broodstock, would then require a permit to enhance the propagation or survival of the listed population (see section 10(a)(1)(A) of the ESA).

If existing hatchery fish can be considered to be part of the biological ESU (and hence could be considered for use in recovery efforts), but are not judged essential for recovery, they will generally not be included in the listed species. In this case, a decision must be made whether to devote future hatchery operations to recovery and conservation under the ESA or to focus on other goals (e.g. fishery enhancement). If hatchery operations are directed toward recovery, then integration of natural broodstock of the listed species into the existing hatchery population would be possible

under an enhancement permit (see section 10(a)(1)(A) of the ESA). If the hatchery population is managed for purposes other than ESA recovery efforts, directed take of natural fish from

the listed species for broodstock would be prohibited, and all aspects of the hatchery operations would need to be consistent with the ESA (see item (5) of this policy statement below). In either case, the amount of time required for all existing hatchery fish to complete their life cycle would represent a transition period for the hatchery population. At the end of this transition period, the hatchery fish would either become part of the listed species (if the recovery alternative is followed) or would be excluded from the listed species (if other goals are pursued).

Under any scenario, progeny of fish from the listed species that are propagated artificially are considered part of the listed species and are protected under the ESA.

Any of the above determinations would be subject to review if substantial new information about the relationship between the natural and artificially propagated fish became available.

(2) Consideration of the use of artificial propagation in the recovery of listed species should be based on an objective assessment of potential risks. Genetic and ecological risks (see Background), together with the inevitable disruption in life-history patterns resulting from artificial propagation, must be balanced against risks to the species if artificial propagation is not used to facilitate a timely recovery. In assessing potential risks to the listed species, it is essential that all factors responsible for the species' decline be identified as early and as completely as possible.

Addressing these factors should be given highest priority in recovery programs for listed species. Artificial propagation is only one of several possible recovery options. Artificial propagation should receive foremost consideration for recovery only when it is believed that recovery within an acceptable time is not likely by addressing these other factors alone; it should not be seen as a substitute for resolving the basic problems that brought the species to the point at which it required ESA protection.

(3) The intent of using artificial propagation for the recovery of listed species is to facilitate rapid restoration of the natural population in the ESU and minimize the risk of further decline. To achieve these goals without disrupting the ecological and genetic integrity of the natural population, artificial propagation must not lead to appreciable differences between naturally and artificially produced fish in characteristics believed to be genetically based. Several general guidelines are provided to reduce this

possibility and minimize risk if artificial propagation is used:

(a) Artificial propagation for recovery should be viewed as a temporary measure, to be held to the minimum necessary for recovery.

(b) Donor stocks intended for artificial propagation must have originated from within the ESU, and the choice of donor stock should take into account existing population structure within the ESU. Under extreme circumstances, use of broodstock from outside the ESU may merit consideration. This option might be considered if the species is reduced to individuals of a single sex or if substantial inbreeding depression gives little hope for recovery of the remaining population without additional genetic material. Contrasting risks of inbreeding and outbreeding depression should be weighed to minimize loss of genetic diversity within and among populations that might result from the choice of donor stock.

(c) Sampling and mating of broodstock should be conducted to provide a representative sample for artificial propagation and, if possible, to allow a representative sample to spawn in the wild. The scale of supplementation that results from artificial propagation should attempt both to maintain a high effective population size for the ESU as a whole and to minimize deleterious ecological effects on natural fish.

(d) Artificial selection of artificially propagated salmon should be avoided, and natural selection in the artificial propagation facility should be minimized to reduce adaptation to the artificial environment. Critical uncertainties exist regarding the best ways to culture and release fish for supplementing natural populations, but undesirable effects may be reduced when artificial propagation is limited to a very few generations and to a small portion of the life cycle, when mortality during artificial culture is held to a minimum, and when the propagation regime attempts to simulate prominent features of the natural environment. In extreme cases where a natural population is threatened with imminent extinction, measures that involve artificial culture for an entire life cycle (i.e., a captive broodstock program) may be appropriate to protect the population and augment its abundance above a dangerously low level. In addition, safeguards to protect fish from mortality and catastrophic loss during artificial propagation should receive high priority.

(4) Effective supplementation and recovery program require careful and systematic monitoring and evaluation.

As part of such programs, monitoring and evaluation should assess long-term as well as short-term effects of artificial propagation on genetic and ecological interactions between artificially and naturally propagated fish. In addition to providing a means to follow genetic and phenotypic relationships between the two groups and to adjust recovery strategies in response to these relationships, monitoring and evaluation is essential to determining when artificial propagation is no longer necessary for recovery and should be terminated. In general, artificial propagation for ESA recovery should cease and all recovery options be reevaluated if artificial propagation is no longer believed to be necessary for timely recovery, if naturally reproducing fish have risen in abundance above levels for delisting, if appreciable differences between artificially and naturally propagated fish have emerged during a recovery program, or if there is evidence that artificial propagation is impeding recovery. (Successful recovery under the ESA does not preclude the use of artificial propagation for purposes such as fishery enhancement so long as these activities are not likely to cause relisting or new listings.)

(5) Artificial propagation of unlisted species must not impede the recovery of listed species or compromise the viability or distinctiveness (and hence be a factor in the listing) of unlisted Pacific salmon. Genetic interactions between different populations, and the deleterious ecological effects of artificial propagation, should be minimized by avoiding stock transfers, restricting broodstock to local populations, modifying culture practices so that they do not induce genetic changes that can disrupt the genetic integrity of other populations, and managing mixed-stock harvests to minimize the catch of natural fish.

Artificial propagation of unlisted species may result in an incidental "take" of a listed species (ESA, sec. 3(18)). Incidental take of a listed salmon species (take that results from, but is not the purpose of, an otherwise lawful activity) can legally occur only after fulfilling the requirements of section 7(a)(2) (for Federal actions) or 10(a)(1)(B) (for non-Federal actions) of the ESA. Direct and indirect risks to listed species discussed above (see Background) are examples of incidental take of listed Pacific salmon. (Directed or intentional take of a listed species may be permitted under section 10(a)(1)(A) of the ESA only if it would further a *bona fide* and necessary or desirable scientific purpose or enhance

the propagation or survival of the listed species. Therefore, directed take of a listed salmon species for enhancement of an unlisted population is not permissible.)

In general, the recommendations provided in 3(b)-(d) above for the use of artificial propagation in the recovery of listed species provide a working foundation for the operation of existing and future artificial propagation facilities in the face of increasing conservation activities. To ensure its compatibility with the ESA, artificial propagation must not compromise the existing genetic and ecological integrity of natural Pacific salmon populations.

Public Comments Solicited

NMFS is soliciting information, comments or recommendations on any aspect of this interim policy from all concerned parties. NMFS will consider all information, comments and recommendations received before publishing a final policy.

Technical Paper

Prior to developing this interim policy, the NMFS Northwest Fisheries Science Center and Northwest Region prepared a paper entitled "Pacific Salmon and Artificial Propagation Under the Endangered Species Act." This technical paper is available upon request (see **FOR FURTHER INFORMATION CONTACT**) and contains more detailed guidance on the application of this policy to Pacific salmon.

Dated: March 30, 1993.

Nancy Foster,

Acting Assistant Administrator for Fisheries,
National Marine Fisheries Service, National
Oceanic and Atmospheric Administration.

[FR Doc. 93-7807 Filed 4-2-93; 8:45 am]

BILLING CODE 3510-22-M

CONGRESSIONAL BUDGET OFFICE

Notice of Transmittal of Sequestration Preview Report for Fiscal Year 1994 to Congress and the Office of Management and Budget

Pursuant to section 254(b) of the Balanced Budget and Emergency Deficit Control Act of 1985 (2 U.S.C. 904(b)), the Congressional Budget Office hereby reports that it has submitted its Sequestration Preview Report for Fiscal Year 1994 to the House of Representatives, the Senate, and the Office of Management and Budget.

Stanley L. Greigg,

Director, Office of Intergovernmental
Relations, Congressional Budget Office.

[FR Doc. 93-7991 Filed 4-2-93; 8:45 am]

BILLING CODE 3107-02-M

COPYRIGHT ROYALTY TRIBUNAL

[CRT Docket No. 93-1-DRD]

1992 Audio Home Recording Act Distribution Proceeding

AGENCY: Copyright Royalty Tribunal.

ACTION: Notice of declaration of controversy.

SUMMARY: This notice is issued to advise the public that the Copyright Royalty Tribunal has determined that controversies exist in the above-referenced proceeding.

DATES: The declaration of controversy is effective March 31, 1993.

FOR FURTHER INFORMATION CONTACT:

Linda R. Bocchi, General Counsel,
Copyright Royalty Tribunal, 1825
Connecticut Avenue, NW., Suite 918,
Washington, DC 20009.

SUPPLEMENTARY INFORMATION: This notice is issued, pursuant to Section 1007(b) of the Audio Home Recording Act of 1992 and Section 301.72 of the Tribunal's regulations, to advise the public that the Copyright Royalty Tribunal has determined that controversies exist in the Musical Works Fund and the Sound Recordings Fund. See 17 U.S.C. 1007(b); 37 CFR 301.72.

The Tribunal has been informally advised that certain of the claimants in the Musical Works Fund have reached a settlement agreement in principal. However, the agreement is not a universal settlement.

Accordingly, the Tribunal finds that controversies exist in the Musical Works Fund and the Sound Recordings Fund, effective March 31, 1993. Based upon its determination, the Tribunal announces the commencement of the 1993 Audio Home Recording Act Distribution Proceeding. The general structure and schedule of the proceeding will be announced at a later date.

Dated: March 31, 1993.

Cindy Daub,

Chairman.

[FR Doc. 93-7847 Filed 4-2-93; 8:45 am]

BILLING CODE 1410-09-M

DEPARTMENT OF DEFENSE

Office of the Secretary

Industry Executive Subcommittee of the National Security Telecommunications Advisory Committee

AGENCY: National Communications
System, DOD.

ACTION: Notice of meeting.